

# Thunder Basin National Grassland 2020 Plan Amendment

## Summary of Issues and Alternatives for Analysis

### Issues

Public comments received during the April-May 2019 scoping period described the following issues that are to be addressed in the environmental impact statement. **Please note that the following issue statements do not represent conclusions. They are public concerns that will be analyzed or addressed in the draft environmental impact statement (DEIS):**

1. Viability of Sensitive Species and Potential Species of Conservation Concern –
  - a. Managed reductions in prairie dog colony size, distribution, or density could decrease the ability of prairie dogs and associated species to persist on the grassland.
  - b. Extreme fluctuations in prairie dog colony extent due to drought, plague, and other environmental disturbances or stressors may occur despite management efforts and could decrease the ability of prairie dogs and associated species to persist on the Grassland.
  - c. Effects of climate change on the grassland ecosystem could impact the ability of prairie dogs and associated species to persist on the grassland.
2. Black-footed Ferret Recovery –
  - a. Managed reductions in prairie dog colony size, distribution, or density could reduce the availability of habitat for black-footed ferret reintroduction, the ability to reintroduce black-footed ferrets on the grassland, and the likelihood of achieving range-wide recovery criteria described in the US Fish and Wildlife Service 2013 Recovery Plan.
  - b. Extreme fluctuations in prairie dog colony extent due to drought, plague, and other environmental disturbances or stressors may occur despite management efforts and could impact the availability of habitat for black-footed ferret reintroduction, the ability to reintroduce black-footed ferrets on the Grassland, and the likelihood of achieving range-wide recovery criteria described in the US Fish and Wildlife Service 2013 Recovery Plan.
  - c. Social issues surrounding black-footed ferret recovery efforts could decrease the likelihood or success of future reintroduction.
3. Forage for Permitted Livestock –
  - a. Management actions that increase or decrease prairie dog colony size, distribution, or density could change forage availability for livestock production on federal land.
  - b. Encroachment of prairie dogs onto private and state lands could impact forage availability for livestock production on private and state land.
4. Economic Concerns –
  - a. Changes to forage availability could impact income and jobs associated with ranching activities.
  - b. Encroachment of prairie dogs onto private lands could decrease land values and impact facilities.

5. Health concerns –
  - a. Existence of plague among wildlife populations on the Thunder Basin could pose a risk to human health.
6. Safety concerns – Prairie dog colonies and burrows could create safety hazards for permittees, workers, visitors, and livestock on federal land and where encroachment has occurred on state and private lands.
7. Recreational Shooting –
  - a. Prohibitions on shooting may eliminate a tool for controlling prairie dog populations.
  - b. Prohibitions on shooting could reduce recreational opportunities and associated economic benefits for surrounding communities.
  - c. Allowing shooting within MA 3.63/3.67 may disrupt prairie dog reproduction and dispersal dynamics and may cause direct take of associated and protected species.
8. Federal Land Boundary Management – A boundary management zone of ¼ mile may not be adequate to prevent encroachment onto private and state lands.
9. Use of Rodenticides –
  - a. Rodenticides used to kill prairie dogs could poison and kill other, non-target wildlife species.
  - b. Restrictions on rodenticide use could make control of prairie dogs ineffective.
10. Cost of Implementation of Plan Amendment – Costs associated with staff time, supplies, and other resources could limit the ability to implement the plan effectively.
11. Failure to Implement Current Management Plan – More aggressive implementation of the current plan could reduce conflicts and the need for a plan amendment.
12. Laws, regulations, and policies –
  - a. Proposed changes to prairie dog management could conflict with requirements of the National Forest Management Act and 2012 Planning Rule, National Environmental Policy Act, and Endangered Species Act, particularly with regard to rangeland management and management of at-risk species.
  - b. Forest Service may not be fulfilling its role regarding recovery of species listed under the Endangered Species Act.
  - c. Forest Service may not have legal authority to manage national grasslands for multiple uses.
  - d. Forest Service may not be appropriately addressing detrimental environmental impacts from prairie dog occupancy, including soil erosion.
13. Candidate Conservation Agreements – Candidate Conservation Agreements and Candidate Conservation Agreements with Assurances (CCAs, CCAAs) could reduce the acres of prairie dog colonies needed on federal land to provide habitat for associated species across the landscape.
14. Greater sage-grouse Habitat – Occupancy of greater sage-grouse habitat management areas by both prairie dogs and greater sage-grouse could create management conflicts.
15. Collaborative Stakeholder Group – If the collaborative stakeholder group is poorly organized, unbalanced in membership, or cannot produce consensus decisions, then the group may be ineffective and recommendations may not be representative of diverse interests.

## Alternatives

Based on review of public comments and concerns, the interdisciplinary team developed three action alternatives that will be analyzed in detail in the environmental impact statement. Table 1 summarizes the major components of each alternative. Maps display the primary planning areas included in each alternative.

**Table 1. Comparison of major components of alternatives**

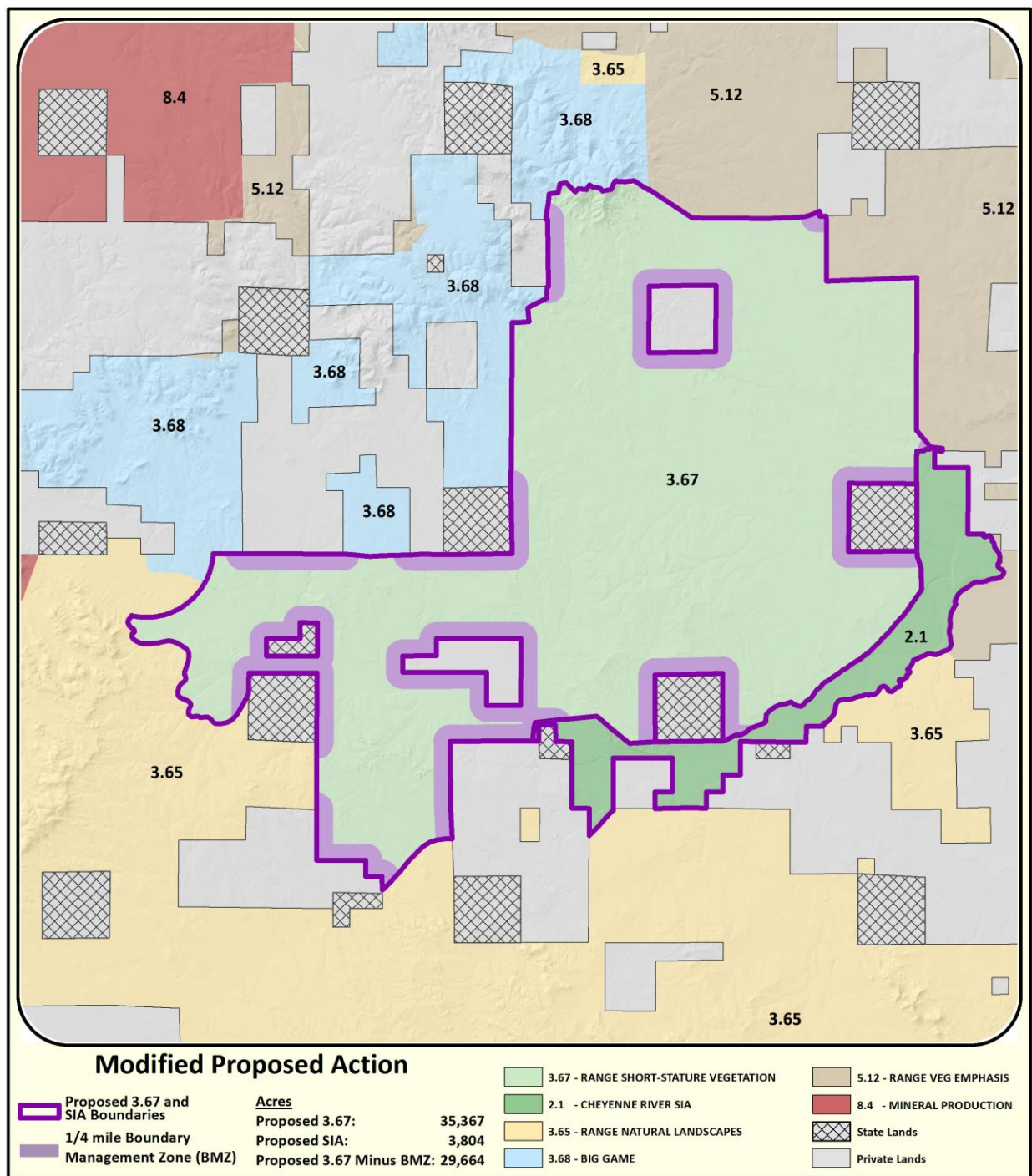
Component	Modified Proposed Action	Grassland-wide	Prairie Dog Emphasis	No Action
<b>Management Area 3.63/3.67</b>	<p>Management Area (MA) 3.63, “black-footed ferret reintroduction habitat,” would be changed to MA 3.67, “rangelands with short-stature vegetation emphasis.” MA size would change from ~51,000 to ~35,000 acres (map 1).</p> <p>Cheyenne River SIA would be redrawn to follow the Cheyenne River along the southeast border of 3.67 (map 1). SIA management direction would be updated to reflect emphasis on riparian habitat. SIA size would change from ~5,900 to ~3,800 acres.</p>	<p>Management Area (MA) 3.63, “black-footed ferret reintroduction habitat,” would be changed to MA 3.67, “rangelands with short-stature vegetation emphasis.” MA size would change from ~51,000 to ~29,000 acres (map 2).</p> <p>Cheyenne River SIA would be redrawn to follow the Cheyenne River along the southeast border of 3.67 and Antelope Creek along the southwest border of MA 3.67 (map 2). SIA management direction would be updated to reflect emphasis on riparian habitat. SIA size would change from ~5,900 to ~5,700 acres.</p>	<p>Management Area (MA) 3.63, “black-footed ferret reintroduction habitat,” would be changed to MA 3.67, “prairie dog emphasis area.” MA 3.67 and Cheyenne River SIA boundaries would remain the same as current (map 3).</p>	<p>MA 3.63, “black-footed ferret reintroduction habitat” is ~51,000 acres in size, and the Cheyenne River SIA is ~5,900 acres (map 4).</p>
<b>Boundary Management Zone (BMZ)</b>	<p>1/4 mile BMZ in 3.67. A temporary ¾ mile BMZ may be granted under special circumstances.</p> <p>Rodenticide use allowed in BMZ regardless of colony acres.</p>	<p>1/4 mile Grassland-wide. A temporary 1 mile BMZ may be granted under special circumstances.</p> <p>Rodenticide use allowed in BMZ regardless of colony acres.</p>	<p>1/4 BMZ mile for category 1; 1/8 mile BMZ for category 2.</p> <p>Rodenticide use allowed in BMZ regardless of colony acres.</p>	<p>No BMZ, but may allow rodenticide use if colony is within ½ mile of boundary, under certain circumstances.</p>

Component	Modified Proposed Action	Grassland-wide	Prairie Dog Emphasis	No Action
<b>Prairie Dog Colony Acre Target/Range and Distribution</b>	<p>Prairie dog colonies would be managed toward a target of 10,000 acres within 3.67.</p> <p>No complexes would be required or designated in standards or guidelines, but desired conditions for MA 3.67 would describe that within MA 3.67, colonies within approximately 4.5 miles (7km) of other colonies are maintained, when possible, to develop colony complexes.</p>	<p>Prairie dog colonies across the grassland would be managed within a range of 10,000-15,000 acres. Colonies located anywhere on grassland would count toward acre range.</p> <p>One 1,500 acre complex would be required and managed for in MA 3.67, and a guideline would direct management for colonies of 200-500 acres in size to provide optimal nesting habitat for mountain plover.</p>	<p>Prairie dog colonies and targets managed based on 2015 management strategy categories:</p> <ul style="list-style-type: none"> <li>• Category 1 would remain the same with 18,000 acre target.</li> <li>• Category 2 areas would be modified to remove Highway 450 and Miller Hills areas and add a Spring Creek area, with a 9,000 acre total target (map 3).</li> <li>• Category 3 targets would be removed.</li> </ul> <p>MA 3.67 would be managed for two 4,500 acre complexes.</p>	<p>Prairie dog colonies and targets managed based on 2015 management strategy categories:</p> <ul style="list-style-type: none"> <li>• Category 1: 18,000 acres</li> <li>• Category 2: 9,000 acres</li> <li>• Category 3: 6,000 acres</li> </ul>
<b>Thresholds for Rodenticide Use</b>	<p>If the District ranger determines that lethal control in MA 3.67 is warranted, and colony acres are below the 10,000 acre target, satellite acres can be identified. If MA 3.67 acres and satellite acres total &gt;7,500, interior rodenticide use in 3.67 can be allowed down to a 7,500 acre minimum.</p> <p>Rodenticides may be used to maintain satellite colonies at designated size.</p> <p>An appendix to the EIS will describe how to designate and un-designate a satellite colony (e.g., requirements, restrictions, role of collaborative).</p>	<p>When acreage is below 10,000 acres grassland-wide, rodenticide use only allowed in BMZ or for density control.</p>	<p>Unlike the current strategy, when target acres are met, by category, lethal control would be allowed within that category to return to target.</p>	<p>Many conditions required for use of rodenticide.</p>

Component	Modified Proposed Action	Grassland-wide	Prairie Dog Emphasis	No Action
<b>Approved Rodenticides</b>	<p>All forms of zinc phosphide approved for use. MA 3.67 must have <math>\geq 7,500</math> acres of colonies (within MA 3.67 or in designated satellite colonies) for use outside BMZ, unless used for density control.</p> <p>Anticoagulants and fumigants prohibited.</p>	<p>All forms of zinc phosphide approved for use. Must have <math>\geq 10,000</math> acres of colonies for use outside BMZ, unless used for density control.</p> <p>Anticoagulants and fumigants allowed in BMZ only after 3 applications of zinc phosphide prove ineffective.</p>	<p>All forms of zinc phosphide approved for use. Must meet acre targets in category 1 and 2 areas before using outside of BMZ.</p> <p>Anticoagulants and fumigants prohibited.</p>	<p>All forms of zinc phosphide approved for use, with many conditions.</p> <p>Only allowed in category 1 area within <math>\frac{1}{2}</math> mile of boundary if acre target met and non-lethal options tried.</p> <p>Otherwise conditional based on decision screens.</p>
<b>Recreational Prairie Dog Shooting</b>	<p>Seasonal restriction (no shooting February 1 – August 15) in 3.67, including BMZ and any identified satellite acres.</p>	<p>No restrictions unless developed as part of complex management plan.</p>	<p>Year-round shooting prohibition in MA 3.67 and category 1.</p> <p>Year-round prohibition in category 2 until acre target met, then seasonal restrictions (no shooting February 1 – August 15) in category 2.</p>	<p>Year-round shooting prohibition in MA 3.63 and category 1; conditional restrictions in category 2 areas.</p>

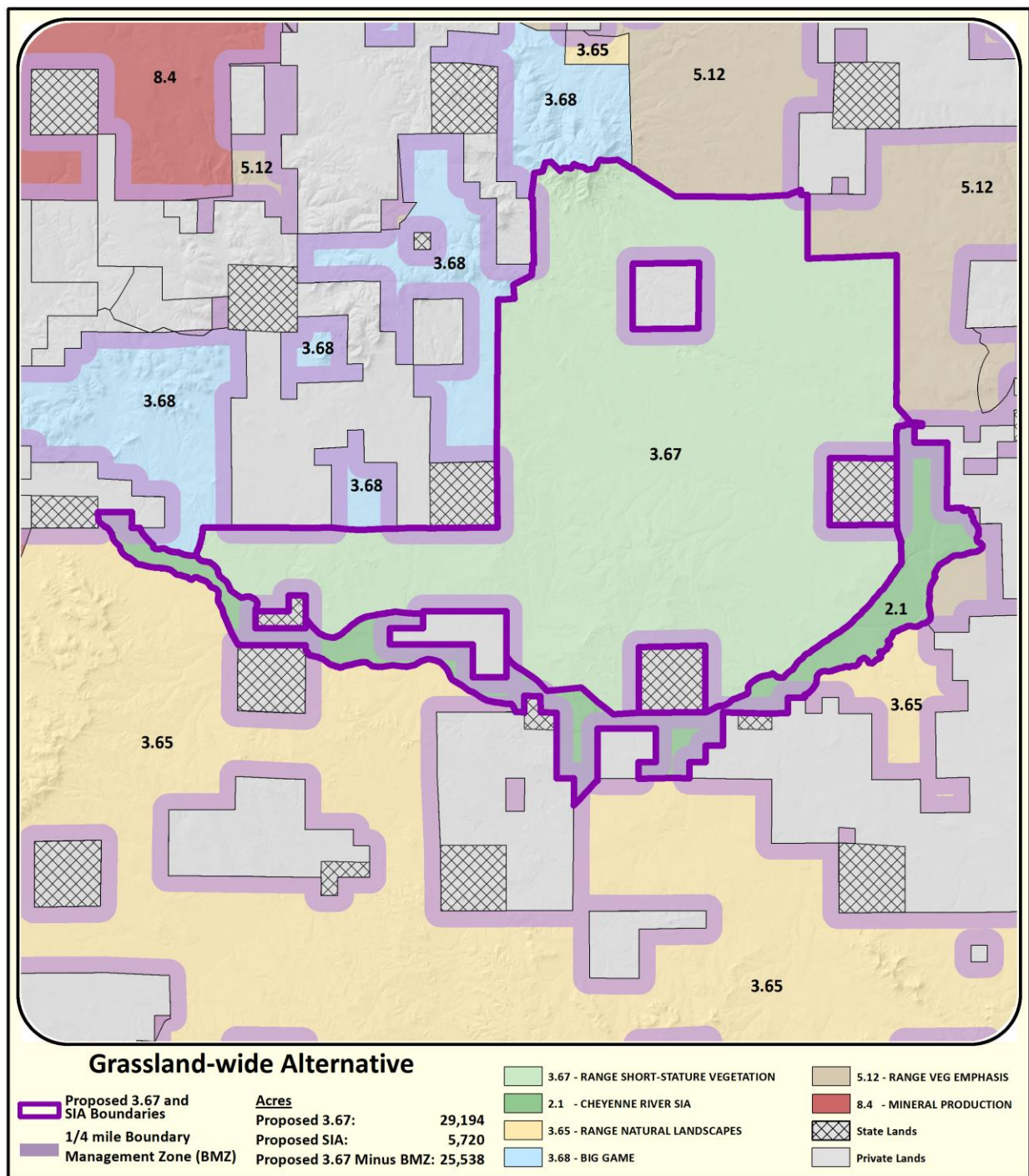
Component	Modified Proposed Action	Grassland-wide	Prairie Dog Emphasis	No Action
<b>Strategy and Collaborative Working Group</b>	<p>The grassland plan would no longer refer to a separate prairie dog management strategy.</p> <p>A collaborative stakeholder group would provide management recommendations to the Forest Service.</p> <p>An appendix to the EIS will describe the role of the collaborative stakeholder group and how they would provide recommendations.</p>	<p>The grassland plan would no longer refer to a separate prairie dog management strategy.</p> <p>A collaborative stakeholder group would provide management recommendations to the Forest Service.</p> <p>An appendix to the EIS will describe the role of the collaborative stakeholder group and how they would provide recommendations.</p>	<p>Components of the 2015 Prairie Dog Conservation Assessment and Management Strategy would be integrated into the grassland plan, and there would no longer be a separate strategy.</p> <p>A collaborative stakeholder group would provide management recommendations to the Forest Service.</p> <p>An appendix to the EIS will describe the role of the collaborative stakeholder group and how they would provide recommendations.</p>	<p>The 2015 Prairie Dog Conservation Assessment and Management Strategy would remain in effect, with a collaborative stakeholder group in place.</p>
<b>Drought Plan</b>	<p>To mitigate prairie dog colony expansion during drought conditions, control tools may be used in active prairie dog colonies to work toward a revised target of 7,500 acres in 3.67 and satellite colonies combined.</p>	<p>To mitigate prairie dog colony expansion during drought conditions, control tools may be used in active prairie dog colonies to work toward a target of 10,000 acres.</p>	<p>No specific management changes under drought conditions.</p>	<p>No specific management changes under drought conditions.</p>
<b>Plague Management</b>	<p>Plague control tools may be used in active prairie dog colonies.</p> <p>An appendix to the EIS will describe plans for plague management including prioritization, application dates, use of vaccines, methods of application, etc.</p>	<p>Plague control tools may be used in active prairie dog colonies.</p> <p>An appendix to the EIS will describe plans for plague management including prioritization, application dates, use of vaccines, methods of application, etc.</p>	<p>Plague control tools may be used in active prairie dog colonies.</p> <p>An appendix to the EIS will describe plans for plague management including prioritization, application dates, use of vaccines, methods of application, etc.</p>	<p>Plague control tools may be used in active prairie dog colonies.</p>

Component	Modified Proposed Action	Grassland-wide	Prairie Dog Emphasis	No Action
<b>Density Control</b>	<p>Density control (e.g., using rodenticide, translocation, collapsing burrows) may be used to maintain desired vegetation conditions. Desired vegetation structure and composition may vary by ecological site or colony.</p> <p>When below 7,500 acres in 3.67 and satellite colonies, treat no more than 50% of any colony.</p> <p>Where density control occurs, pretreatment data must be collected and monitoring data must be collected for a minimum of 2 years after treatment.</p> <p>An appendix to the EIS will describe considerations for density control, such as associated species presence and habitat; ESD and desired state; frequency and past use of density treatments; monitoring information; collaborative and interdisciplinary discussion of methods.</p>	<p>Density control (e.g., using rodenticide, translocation, collapsing burrows) may be used to maintain desired vegetation conditions. Desired vegetation structure and composition may vary by ecological site or colony.</p> <p>When below 10,000 acres, treat no more than 50% of any colony.</p> <p>Where density control occurs, pretreatment data must be collected and monitoring data must be collected for a minimum of 2 years after treatment.</p> <p>An appendix to the EIS will describe considerations for density control, such as associated species presence and habitat; ESD and desired state; frequency and past use of density treatments; monitoring information; collaborative and interdisciplinary discussion of methods.</p>	No density control	No density control

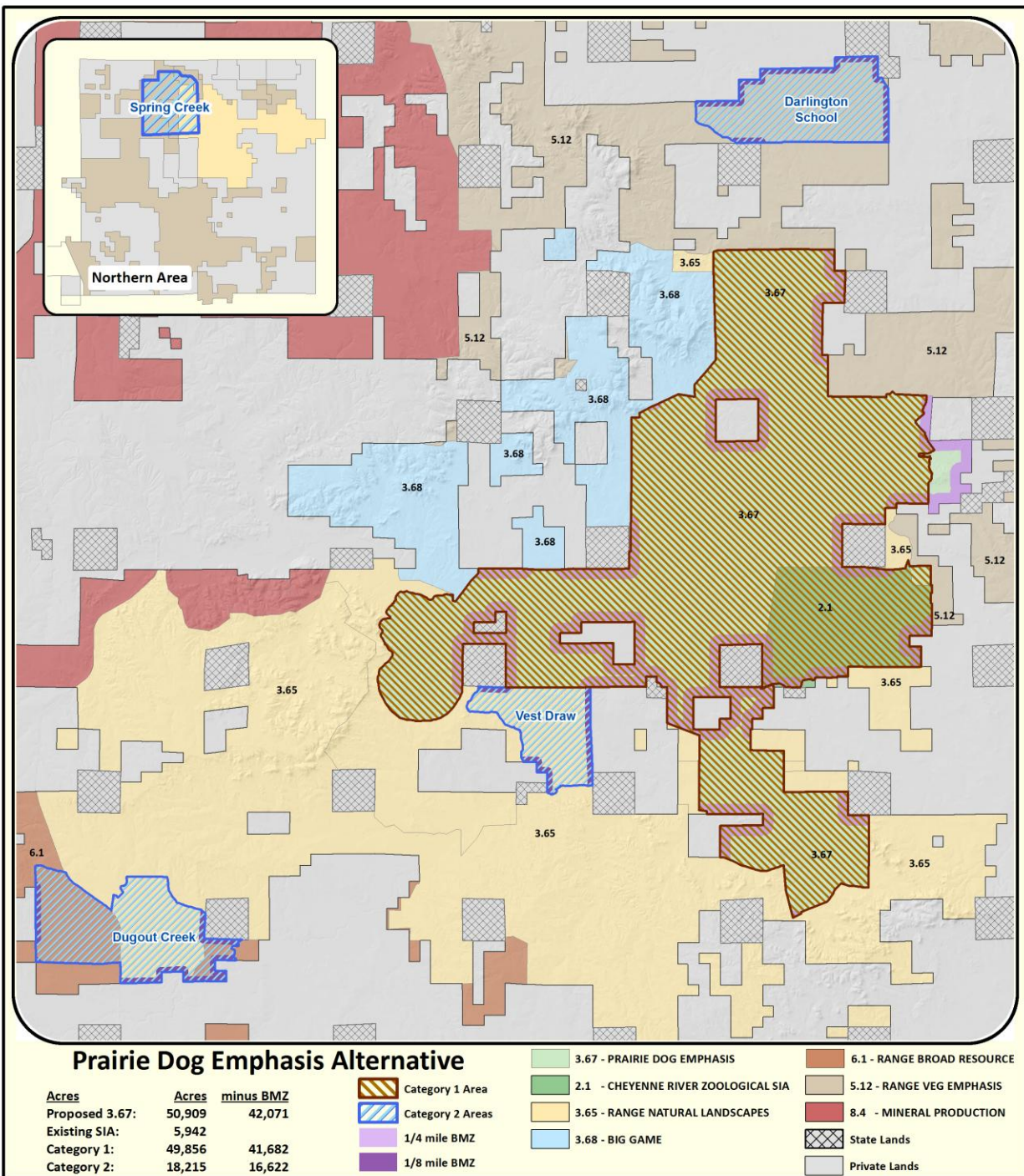


**Map 1. Delineation of Management Area 3.67 and the Cheyenne River Special Interest Area in the Modified Proposed Action.**



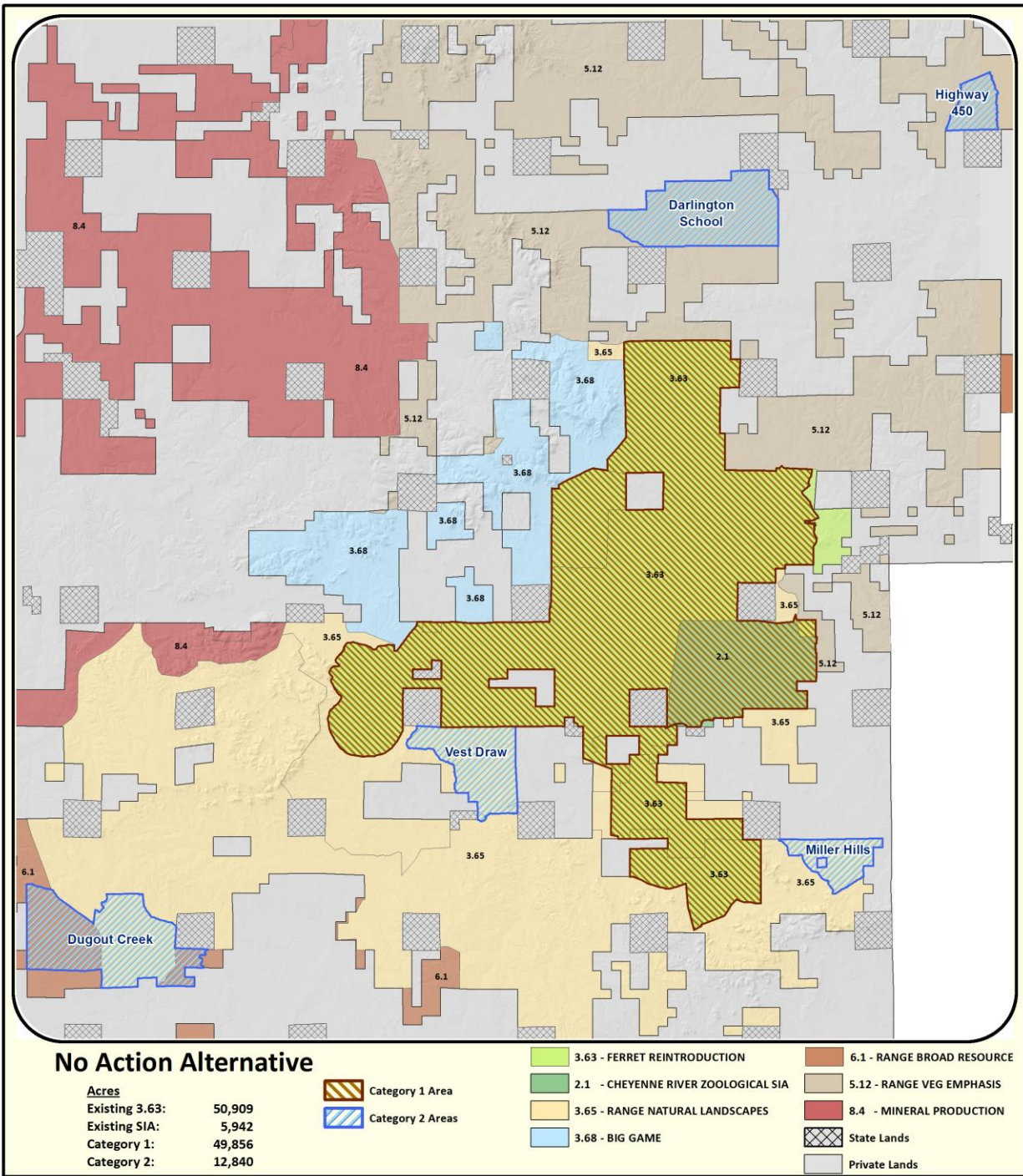


**Map 2. Delineation of Management Area 3.67 and the Cheyenne River Special Interest Area in the Grassland-wide Alternative.**



Map 3. Delineation of Management Area 3.67, the Cheyenne River Special Interest Area, Category 1, and Category 2 areas in the Prairie Dog Emphasis Alternative.





**Map 4. Delineation of Management Area 3.63, the Cheyenne River Zoological Special Interest Area, Category 1, and Category 2 areas in the No Action Alternative.**